List of Fishes Collected at Hong Kong by Captain William Finch, with Description of Five New Species

BY DAVID STARR JORDAN AND ALVIN SEALE

In the summer of 1900, in connection with the explorations of Japan made by Professors David Starr Jordan and John Otterbein Snyder, a collection of fishes from the market of Hong Kong was obtained by Captain William Finch, commander of the steamer Gaelic of the Pacific Mail Steamship Company. This collection was sent to the museum of Stanford University, a series of duplicates being placed in the United States National Museum. As the fauna of no part of the world is less exactly known than that of China, it is worth while to place this list on record. The following species seem to be new:

Sphyræna putnamiæ	No. 9063 Stanford University.
Caranx altissimus	No. 9066
Amia elizabethæ	No. 9064
Pseudosciæna undovittata	No. 9065
Insidiator detrusus	No. 9067

Family CARCHARIIDÆ.

1. *Scoliodon acutus* (Rüppell).

One specimen, length 18 inches, snout about equal to distance from eye to gill opening, pectorals with posterior margin slightly concave, length of base of anal one-half its distance from ventral, teeth entire.

Color grayish, top of caudal dusky.

Family SPHYRNIDÆ.

2. *Sphyrna zygæna* (Linnæus).

One specimen of the common Hammer Head shark. Length 18 inches.

Family NARCOBATIDÆ.

3. *Narcine timlei* (Bloch and Schneider). (Plate 1).

Disk almost round, the two dorsals about equal, hind margin of caudal rounded, united with lower; no fringes on spiracles, which are immediately behind eye.

Color, in spirits, light brown; the upper surface with large, round, brown spots larger than interspaces; ventral surface white.

Two specimens. Length 7–7.20 inches.

Family DASYATIDÆ.

4. *Dasyatis zugei* (Müller and Henle).

Snout rather long-acuminate, pointed at tip, the margins nearly straight. Width of disk slightly greater than its length; length of disk 1.75 in the long whip-like tail; a prominent fold or membrane on upper and lower side of tail; upper surface of the disk smooth (young); eye two in interorbital space; length of eye about equal to the spiracle immediately behind it.

Color, in spirits, uniform light brown above; white below; membrane on tail black.

Two specimens. Length 11–11.50 inches; from Hong Kong.

In overhauling our Japanese material we find nothing which really corresponds to *Dasyatis kuhli*, and the latter species, known by the bluish spots, should be stricken from the list of fishes of Japan. We are not sure that the specimens called *Dasyatis kuhli* from Japan are distinct from *Dasyatis akajei*.

Family DOROSOMATIDÆ.

5. *Konosirus thrissa* (Linnæus).
(*Clupea nasus* Bloch).

Head 4 in length; depth 2.75; eye 3.85; D. 16, the last ray elongate; A. 22, the snout projecting beyond the lower jaw, maxillary extending to below middle of eye; the last dorsal ray elongate, reaching base of caudal.

Color, in spirits, brownish above each row of scales with a line of brown spots, uniform silvery below; a large dusky blotch posterior to upper margin of opercle.

This species is quite distinct from the Japanese species, *Kono-*

sirus punctatus, which species is more elongate, with the upper jaw less prominent.

Three specimens. Length 6–6.25 inches.

There is yet no trustworthy evidence that *Konosirus thrissa* occurs in Japan, or that *Konosirus punctatus* is found in China. *Chatæssus aquosus* Richardson, from Canton, seems to be *K. thrissa*.

Family CLUPEIDÆ.

6. *Ilisha elongata* (Bennett).

Head 4.20 in length; depth 7.50; eye 3.10; adipose eyelid well developed; origin of dorsal midway between tip of snout and base of caudal, anal long, abdomen sharp.

Color, in spirits, silvery white; no dusky markings.

One specimen. Length 16 inches.

Family SYNODONTIDÆ.

7. *Saurida japonica* (Houttuyn).
Saurida argyrophanes (Richardson).
Saurida elongata (Schlegel).

Head 4.50 in length; depth 7.50; eye 6 in head; D. 11; A. 10; scales about 56; snout 4.50 in head; interorbital about equal to snout; adipose eyelid little developed; eye situated on line with middle of lower jaw, a ridge on sides of tail.

Color, in spirits, brownish above with some indistinct blotches, white below; pectorals grayish; caudal grayish-white.

Three specimens. Length 6–6.50 inches.

Family CYPRINIDÆ.

8. *Cyprinus carpio* Linnæus.

Head 3 in length; depth 3; eye 5.50 in head; D. III, 22; A. III, 5, barbels 2; largest dorsal and anal spine serrated behind; scales 30.

Color, in spirits, dusky above; yellowish on lower sides and belly.

Four specimens. Length 7–8 inches.

9. *Ctenopharyngodon idella* (Cuv. and Val.)

Head 3.80 in length; depth 4.75; scales 42, D. 11; A. 10; eye 7; snout 2.85, lips thick, 15 rows of scales before the dorsal, insertion of ventrals on line with origin of dorsal.

Color, in spirits, silvery with slight dusky wash at margin of scales, a bluish wash above.

One specimen. Length 14.50 inches.

Family MONOPTERIDÆ.

10. *Monopterus albus* (Zuieuw).

Head 14.75 in total length.

Color, a drab above, slightly lighter below, with slight indistinct line-marking on under surface.

Three specimens. Length 11–12.50.

Family MURÆNESOCIDÆ.

11. *Muræncsox talabon* (Cuvier).

Head 3 in trunk; snout 3.50 in head; mouth, from angle, 1.10 in head; vomerine teeth are conical, straight, wide set, none of them with lobes.

Color, in spirits, grayish, washed with yellowish below, darker above; dorsal with dusky margin.

One specimen. Length 42 inches.

Family MUGILIDÆ.

12. *Mugil cephalus* Linnæus.
(*Mugil cur* Forskål).

Head 3.75; depth 4.15; eye 4.25 in head; D. IV, 8; A. III, 8; scales 39.

Color, in spirits, a light wash of brownish above; silvery below, indistinct dark spot at axil; tip of caudal with a white wash of dusky; fins all white.

Three specimens. Length 5.55–6.50 inches.

This species is identical with the Japanese species. *Mugil cur* (=*cephalotus* = *japonicus*), but as yet no characters separating it from the cosmopolitan *Mugil cephalus* have been pointed out.

Family SPHYRÆNIDÆ.

13. *Sphyræna putnamiæ* Jordan and Seale, new species.

Head (including under jaw) 1.98 in length to base of caudal; depth 7; eye 6.50 in head; D. V, 10; A. 9; scales about 152;

opercle rounded, without a distinct point; preopercle rounded; snout 2 in head; interorbital 3 in snout; opercles and cheeks scaled.

Body elongate, slightly compressed; the head strongly pointed; depth of caudal peduncle 2 in snout; lateral line distinct, 23 series of scales between lateral line and base of dorsal at origin, lower jaw prolonged; mouth large; maxillary reaching to below anterior third of eye; its length 2 in head; teeth in lower jaw in single row, about 10 on each side, directed backward, a single large chisel-like tooth at symphysis; teeth of upper jaw much larger with an outer row of small teeth; six very large teeth on each side in the inner row; origin of dorsal over anterior third of the ventrals; longest dorsal spine 1.50 in snout; origin of soft dorsal equal to distance between base of caudal and origin of first dorsal; origin of anal under anterior third of soft dorsal; base of anal and base of soft dorsal equal 1.70 in snout; caudal emarginate; pectorals short, 1.75 in snout; scales deciduous.

Color, in spirits, yellowish white, grayish on back, a dusky wash on upper part of head; the dorsal fins and tip of caudal with a slight wash of dusky.

Three specimens from Hong Kong, China. Length 7.50–8 inches.

The type is No. 9063 Stanford University, from Hong Kong. Length 7.90 inches.

This species bears some resemblance to the Japanese *Sphyræna japonica* Cuv. and Val., but the scales are much smaller even than in the latter. *Sphyræna chinensis* Lacépède, based on a Chinese drawing, is wholly unrecognizable. The species is named for Mrs. Putnam, the honored patron of the Davenport Academy of Sciences.

Family HOLOCENTRIDÆ.

14. *Holocentrus ruber* (Forskål). (Plate 2).

Head 3 in length; depth 3; eye 2.75; D. XI, 13; A. IV, 9; scales 2–38.

Color, in spirits, yellowish white with several pale red lines on outer edge of caudal; and membrane between last anal spine and first ray dusky, a red blotch just below base of dorsal.

Two specimens. Length 6–7 inches.

These differ from *Holocentrus praslin* Lacépède, a species or subspecies, which replaces *H. ruber*, in the Riukiu Islands and in the South Seas generally, in the much paler coloration, there being no purple-black stripes or markings.

Family TRICHIURIDÆ.

15. *Trichiurus japonicus* Schlegel.

Head 6.25 in length; depth 12.75; D. 1.40; eye 2.50 in snout.

Color, in spirits, silvery; dorsal yellowish with dusky outer margin.

Family SCOMBRIDÆ.

16. *Scombcromorus guttatus* (Bloch and Schneider).

Head 4 in length; depth 5; eye 6 in head; D., XVI,–I, 16 IX; A. 1, 20, X; about 12 triangular teeth in each side of upper jaw; maxillary extends to posterior margin of eye.

Color, in spirits, bluish above, silvery below sides; numerous round dusky spots; lobes of dorsal, anal, caudal yellowish.

Three specimens. Length 11 to 12 inches.

Family CARANGIDÆ.

17. *Decapterus russelli* (Rüppell).
(*Caranx maruadsi* Schlegel).

Head 3.50 in length; depth 4; eye 3.10 in head, the adipose eyelid well developed. D. VIII,–I, 29–I; A. II,–I, 27.

Color, in spirits, silvery, slightly brownish above; a distinct opercular spot.

Four specimens. Length about 5 inches.

18. *Caranx kalla* Cuv. and Val.

Head 3.75; depth 2.75 in length to base of caudal; eye 2.50 in head; the posterior adipose eyelid well developed. D. VI, 23; A. II,–I, 20; curved portion of lateral line 1-75 into straight part, the line becoming straight under fourth dorsal ray; 43 armed plates in straight portion; teeth in jaws, vomer, palatines and tongue; no canines; breast scaled.

Color, in spirits, brownish above, silvery with yellowish reflection below, opercular spot distinct; posterior margin of opercles dusky.

One specimen. Length 5 inches.

19. *Caranx altissimus* Jordan and Seale, new species. (Plate 3).

Head 3; depth 1.75 in length to base of caudal; eye 3 in head; no adipose eyelid; snout 2.90 in head; D. VIII, 24; A. II–I, 21; small teeth on jaws, vomer, palatines and tongue, the teeth of jaws in two or more series; no canines; interorbital about one-third less than snout. Body elevated, compressed, the profile evenly rounded, the body very deep; breast naked; the lateral line curved to below posterior third of soft dorsal, the straight portion 1.65 in curve. There are about 35 armed scales in straight portion of lateral line; the scutes not strongly developed; maxillary reaching to below the anterior margin of eye; opercles with notch on upper part; caudal peduncle slim, its length twice its depth; dorsal spines connected, the third spine the longest, 2.75 in head; lobe of soft dorsal 2 in head; anal similar to soft dorsal, its lobe 1.75 in head; ventrals not reaching base of anal, their length 1.75 in head; pectorals 1.10 in head; caudal deeply forked.

Color, in spirits, lower half silvery; upper half with grayish wash; usually four indistinct wide vertical bands of gray on sides; caudal yellowish without dusky margin; ventrals white with a slight wash of dusky at tip, other fins whitish, unmarked; opercular spot very indistinct; a dusky blotch at inner axis of pectorals; a dusky blotch on upper part of eye.

Two specimens from Hong Kong, China. Length 4.75–5 inches.

The type is No. 9066 Stanford University. Length 4.75 inches.

In form this fish somewhat resembles the Japanese *Caranx equula* (Schlegel) but it is deeper and more gibbous on upper profile. The fins in *Caranx equula* have no dark markings.

20. *Caranx atropus* (Bloch and Schneider).

(*Caranx nigripes* Cuv. & Val.)

Head 3.75 in head; depth 1.75; curved portion of lateral line 1.75 in straight part; D. VI–II, 22; A. II,–I, 18; teeth in villiform bands on jaws, vomer, palatines and tongue; breast naked; about 44 armed scales in straight portion of lateral line.

Color, in spirits, brownish above, silvery below; ventrals black, other fins yellowish white.

One specimen from Hong Kong. Length 5 inches.

This species is characterized by the long black ventrals.

Family STROMATEIDÆ.

21. *Stromateoides argenteus* (Bloch).

Head 4.10 in length; depth 1.40; eye 3.75 in head; ventrals none; gill membranes at isthmus united up to a line with lower base of pectorals, lateral line smooth.

Color, in spirits, silvery white, bluish above, yellowish on caudal and caudal peduncle, lobe of dorsal dusky; pectorals yellowish.

One specimen. Length 11 inches.

22. *Apolectus niger* (Bloch).

Head 3.30 in length; depth 1.90; eye 4.75 in head; spinous dorsal obsolete; soft dorsal about 38, A. about 38, no ventrals; pectorals long and falcate, their length greater than head, being 2.18 in length of body, lateral line complete, but slightly curved, and with a few (17–18) slightly developed plates along sides of caudal peduncle; apparently a single row of very small teeth in each jaw, more on vomer or palatine; small scales entirely covering body; lobes of caudal equal.

Color, in spirits, grayish with some slight tints of bluish, some yellowish blotches on head and on lateral rays of caudal; a large, very distinct and sharply defined opercular spot in front of pectoral fin.

One large specimen.

Family EQUULIDÆ.

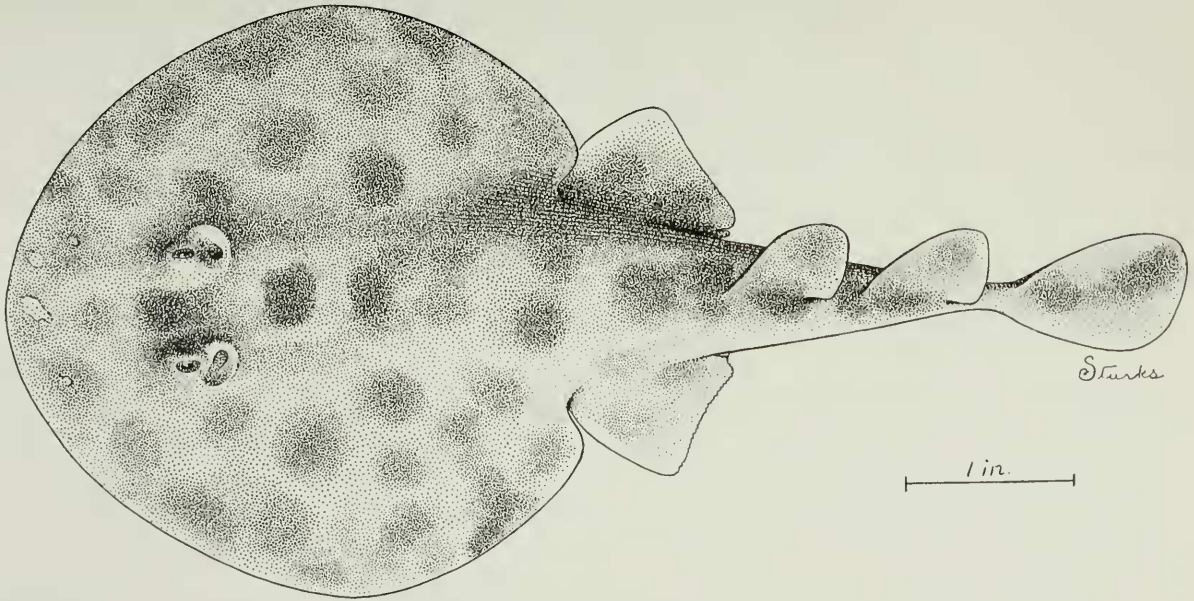
23. *Equula insidiator* (Bloch).

Head 4 in length; depth 2.35; eye 2.50 in head; lateral line incomplete; D. VIII, 16; A. III, 14; breast naked; supraorbital finely serrated, mouth almost vertical.

Color silvery, a black line from lower anterior margin of orbit to chin; back with irregular vertical blackish streaks usually interrupted with spots.

Four specimens. Length about 3.20 inches.

These are similar in most respects to specimens from Manila, although the latter have a little larger eye and a smaller number of bands on the back.



NARCINA TIMLEI (BLOCH AND SCHNEIDER).

Jordan and Seale—Fishes From Hong Kong.

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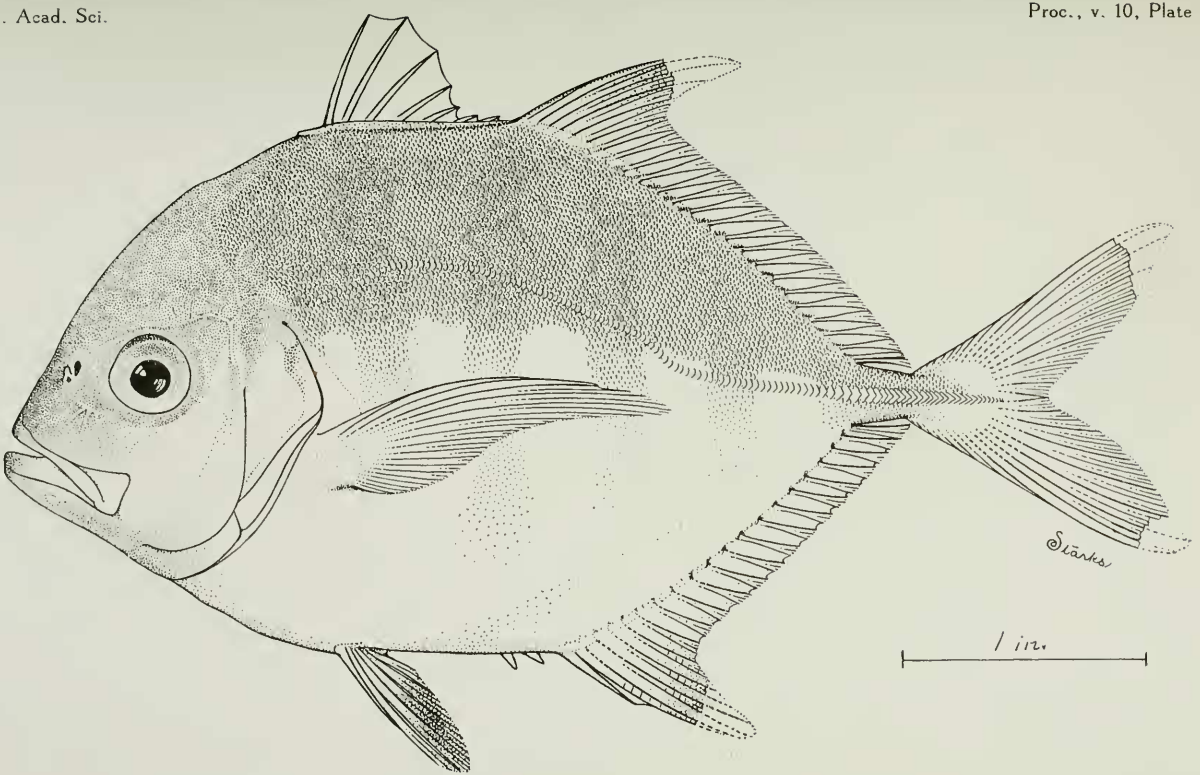
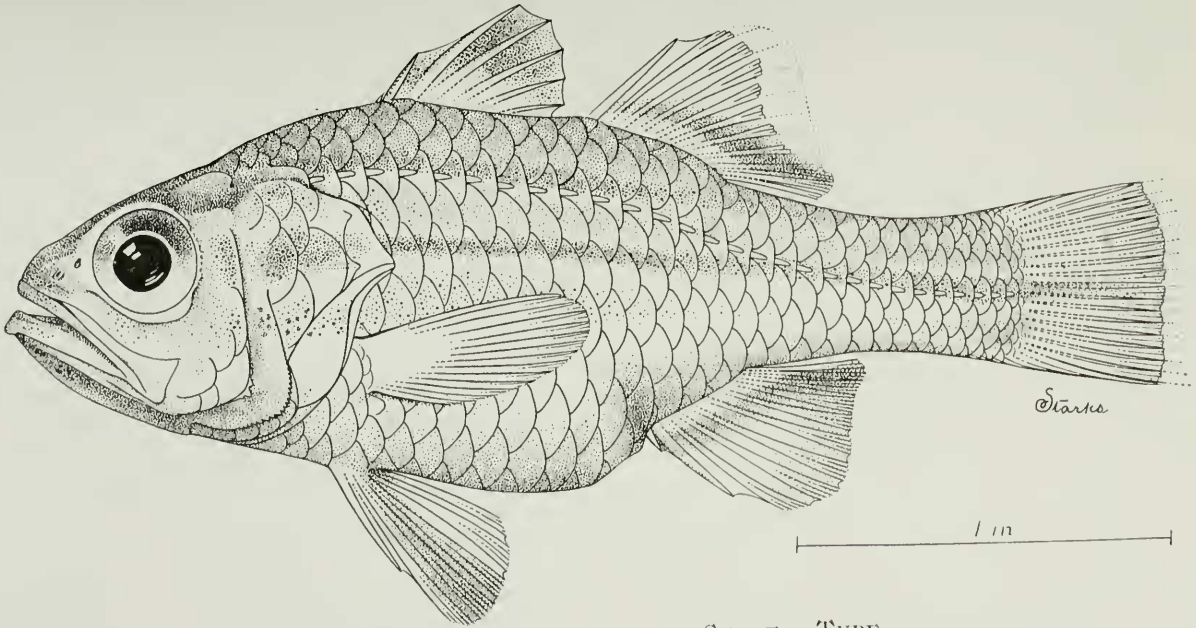
Jordan and Seale—Fishes From Hong Kong
Atkinson, Del.

HOLOCENTRUS RUBER (FORSKÅL).

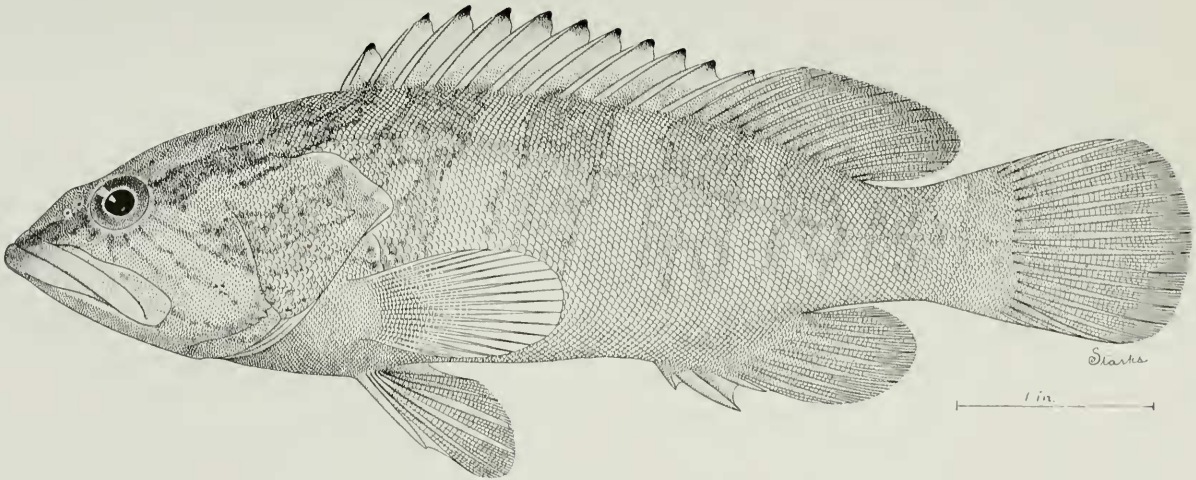


Jordan and Seale—Fishes From Hong Kong.

CARANX ALTISSIMUS JORDAN AND SEALE. TYPE.



AMIA ELIZABETHÆ JORDAN AND SEALE. TYPE.



ÈPINEPHELUS MOARA (SCHLEGEL).

Jordan and Seale—Fishes From Hong Kong.